

BIOL-103: INTRODUCTION TO NUTRITION

Effective Term

Fall 2026

CC Approval

12/05/2025

AS Approval

12/11/2025

BOT Approval

12/18/2025

COCI Approval

02/19/2026

SECTION A - Course Data Elements

CB04 Credit Status

Credit - Degree Applicable

Discipline

Minimum Qualifications	And/Or
Biological Sciences (Master's Degree)	

Subject Code

BIOL - Biology

Course Number

103

Department

Biology

Division

Science and Engineering (SE)

Full Course Title

Introduction to Nutrition

Short Title

Introduction to Nutrition

CB03 TOP Code

0401.00 - Biology, General

CB08 Basic Skills Status

NBS - Not Basic Skills

CB09 SAM Code

E - Non-Occupational

Rationale

Update DEI.

SECTION B - Course Description

Catalog Course Description

This is a general introduction to concepts of nutrition and its relation to human health. Course topics include a study of nutrients; their use and effect in the body; psychological, socioeconomic and geographic influences of nutritional practices; and current nutritional concerns. Calorie and nutrient analysis is considered in relation to balanced diets and weight control.

SECTION C - Conditions on Enrollment**Open Entry/Open Exit**

No

Repeatability

Not Repeatable

Grading Options

Letter Grade or Pass/No Pass

Allow Audit

Yes

Requisites**SECTION D - Course Standards****Is this course variable unit?**

No

Units

3.00000

Lecture Hours

54

Outside of Class Hours

108

Total Contact Hours

54

Total Student Hours

162

Distance Education Approval**Is this course offered through Distance Education?**

Yes

Online Delivery Methods

DE Modalities	Permanent or Emergency Only?
Entirely Online	Permanent
Hybrid	Permanent
Online with Proctored Exams	Permanent

SECTION E - Course Content**Student Learning Outcomes**

Upon satisfactory completion of the course, students will be able to:

- Analyze nutrient content of a diet.
- Demonstrate an understanding of the role of nutrients in the functioning of the body.

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- Develop knowledge of the components and benefits of a healthy diet.
- Produce a detailed analysis of the student's own diet.
- Apply dietary analysis criteria to obtain a balanced diet.

4. Develop an understanding of the role of nutrients and their actions in the body.
5. Become familiar with the techniques used to study nutrition.
6. Develop an understanding of the significance of the social and cultural roles of food.
7. Develop an understanding of the importance of individual variation in relation to food nutrients and additives.
8. Develop a basic understanding of the chemical and physical processes that pertain to life.
9. Become familiar with sources of information for continued education in nutrition.

Course Content

1. Overview of Nutrition
 - a. Current issues in nutrition
 - b. Undernutrition and malnutrition
 - c. Sociocultural aspects of nutrition
2. Carbohydrate
 - a. Types of carbohydrate
 - b. Carbohydrate digestion
 - c. Carbohydrate metabolism abnormalities
3. Fat and Other Lipids
 - a. Essential lipids
 - b. Saturated and unsaturated fats
 - c. Dietary fat and body fat
4. Protein
 - a. Composition of protein
 - b. Protein sources
 - c. Protein quality
5. Energy Balance
 - a. Caloric value
 - b. Energy balance
 - c. Fat storage
6. Mineral Elements
 - a. Physiological role of minerals
 - b. Mineral requirements and toxicity
7. Water
 - a. Body water compartments
 - b. Water balance
8. Vitamins
 - a. Metabolic functions of vitamins
 - b. Fat-soluble and water-soluble vitamins
 - c. Vitamin requirements and toxicity
 - d. Vitamin deficiencies
9. Diet Selection
 - a. Dietary standard
 - b. Adequate diets
10. Evaluation of Nutritional Status
 - a. Nutritional assessment methods
11. Special Nutritional Requirements
 - a. Pregnancy and lactation
 - b. Infant nutrition
 - c. Childhood nutrition
 - d. Adult nutrition: women and men
 - e. Diabetes
 - f. Nutritional considerations in aging
12. Weight Control
 - a. Obesity
 - b. Dieting
 - c. Eating disorders
13. Alternative Diets
14. Social, Cultural, and Political Aspects of Nutrition

Methods of Instruction

Methods of Instruction

Types	Examples of learning activities
Lecture	Computer based lectures supplemented with instructor initiated on-line discussion with students and additional on-line resources.
Discussion	

Online Adaptation

Types	Examples of learning activities
Lecture	
Discussion	

Instructor-Initiated Online Contact Types

Announcements/Bulletin Boards
 Chat Rooms
 Discussion Boards
 E-mail Communication
 Telephone Conversations
 Video or Teleconferencing

Student-Initiated Online Contact Types

Chat Rooms
 Discussions
 Group Work

Course design is accessible

Yes

Methods of Evaluation

Methods of Evaluation

Types	Examples of classroom assessments
Exams/Tests	For Distance Education, the exams will be proctored.
Quizzes	Distance Education quizzes will be administered on-line.
Class Participation	Distance Education the participation will use discussion boards.
Homework	Distance Education assignments will be submitted on-line.

Assignments

Reading Assignments

Reading assignments include approximately 500 pages of textbook material and additional handouts prepared from current nutrition journals and popular media.

For example:

Read chapter 2 of the textbook in preparation to the lecture on dietary guidelines. Read the article on expanding obesity rates in America in preparation for the class discussion on obesity.

Writing Assignments

Writing assignments include a book report on a nutrition book and a diet analysis summary.

Examples: Write a book report on a nutrition book covering a topic of your choice. Write a diet analysis summary using your food consumption data collected over a one-week period.

Outside-of-Class Assignments

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SECTION F - Textbooks and Instructional Materials

Material Type

Textbook

Author

Insel, Turner & Ross

Title

Discovering Nutrition

Edition/Version

5th

Publisher

Jones & Bartlett Publishers

Year

2013

Material Type

Textbook

Author

Blake

Title

Nutrition and You

Edition/Version

4th

Publisher

Pearson/Benjamin Cummings

Year

2016

SECTION G - Diversity, Equity and Inclusivity**How does your course and/or course outline of record reflect strategies for accommodating and engaging diverse student populations, advancing equitable outcomes, and fostering inclusion for all students?**

This course supports diverse student populations through the use of multiple representations of concepts, varied applications, and technology. Strategies may also include collaborative learning, transparent assessment practices, low-cost resources, and opportunities for students to connect course material to their own experiences, fostering equitable outcomes and an inclusive classroom environment.

Course Codes (Admin Only)**CB00 State ID**

CCC000245893

CB10 Cooperative Work Experience Status

N - Is Not Part of a Cooperative Work Experience Education Program

CB11 Course Classification Status

Y - Credit Course

CB13 Special Class Status

N - The Course is Not an Approved Special Class

CB23 Funding Agency Category

Y - Not Applicable (Funding Not Used)

CB24 Program Course Status

Program Applicable

Allow Pass/No Pass

Yes

Only Pass/No Pass

No